CLINAM
European Foundation for Clinical Nanomedicine
Switzerland

14/2023

14th European and Global Summit for Clinical Nanomedicine

Summit and Exhibition

Summit with sessions of three other conferences of excellence

Phospholipid Research Center

LIPOSOME RESEARCH DAYS
International meetings on liposomes, lipidic nanoparticles and membrane biophysics

APV MAKING SCIENCE WORK

Clinical Nanomedicine 2023: Fulfilling the Global Potential

Crossing the Horizon towards Novel Possibilities, Existing and Evolving Products, Technologies, Research and Strategies for Global Health

Final Programme and Call for Posters
Update until July 2023

Basel, Switzerland from October 8. - 11. 2023
Venue: Novartis Campus Basel, Switzerland

The Supporters of CLINAM's Goals and Strategy

Overview

SUNDAY			
TIME			
16:30	General Assembly of the International and European Societies for Nanomedicine (Hotel Marriot)		
17:40	Board Meeting of the Journal "Precision Nanomedicine", Official Journal of CLINAM. First IPRP-meetings		
19.15	Aperitif and light Dinner for all already arrived Speakers and Chairs at hall Helvetia, Marriott Hotel		
MONDAY			
TIME	**Hall 1**		
08:30	**1.** Opening Addresses from CLINAM		
08:45	**2.** Scientific Introduction of the Summit 2023		
09:10	**3.** From Origin of Life to Next Generation Therapeutics (Prof. Dr. Ada Yonath, Nobel Laureate)		
10:00	BREAK		
10:30	**4.** Cancer Nanomedicine		
12:30	LUNCH		
13:30	**5.** The Overall Progress in the Field of Non-Biological Complex Drugs (NBCDs); Past Successes, Future Opportunities and Remaining Challenges		
15:00	**6.** Graphene in Nanomedicine		
15:40	BREAK	**Separate Hall**	**Separate Hall**
16:15	**7.** Novel Nanotherapies in Infection, Inflammation and Chronic Pain	**8.** CLINAM Posters – Small Speeches	**9.** IPRP (Invitation Only)
17:45	**10.** Late Breaking Trials and Developments		
19:00	END OF DAY 1		
19:45	Brokerage- and Networking Dinner with Cultural Intermezzos and presentation of the CLINAM Dwarf-award (Ball Hall Mövenpick)		
TUESDAY			
TIME	**Hall 1**	**Hall 2**	
08:30	**11.** Polymeric Micelles: Preclinical Progress and Clinical Translation	**12.** The Surprising Role of Monoacyl Phospholipids (lysolipids)	
10:30	BREAK		
11:00	**13.** Lipid Nanoparticles: Changing the Future of Medicine	**14.** Nanoparticle Based Formulations against AMR	
12:40	LUNCH		
13:40	**15.** Pharmaceutical Product Design, Development and Manufacturing Insights (APV)	**16.** Chemistry in or Inspired by Living Systems	
15:30	BREAK		
16:00	**17.** Immune-mediated and Related Disorders: Immunotherapy	**18.** COVID, mRNA and beyond	
17:20	**19.** Advancing the Development of Novel Bioconjugate-based Therapies		
18:20	**20.** From Supramolecular Chemistry to Related Fields (Prof. Dr. Jean-Marie Lehn, Nobel Laureate)		
19:15	END OF DAY 2		
20:00	Apéritif and Dinner (Merian Hall)		
WEDNESDAY			
TIME	**Hall 1**	**Hall 2**	
08:15	**21.** Nano-capsules and Nanoparticles Modulating the Immune System	**22.** Biosensors, Diagnostics, Image-guided Nanomedicine	
10:15	BREAK		
10:45	**23.** Nanoscale Approaches to Biology	**24.** Applied Mechanobiology in Nanomedicine	
12:15	LUNCH		
13:15	**25.** Entrepreneurship in Nanomedicine: Novel Concepts, Drug Development Tools and Therapies	**26.** Toxicity and Safety in Nanomedicine	
14.15		**27.** Extracellular Vesicles in Nanomedicine - Exosomes	
15:15	BREAK		
15:45	**28.** Science and Fake Publications – The Current State of Publications	**29.** Pharmacokinetics in Nanomedicine and Nanocarriers	
17:15	**30.** The Regulatory Authorities' Voice 2023		
18:45	Closing of the Summit		
19:00	END OF SUMMIT		
20:00	Light Farewell Dinner		

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INDEX

Scientific Committee or the Summit 2023

- **Prof. Dr. med. Patrick Hunziker,** Deputy Head of the Intensive Care Clinic of the University Hospital Basel (CH)
- **Prof. Dr. Lajos Balogh,** Editor-in-Chief, Precision Nanomedicine (PRNANO), Boston (USA)
- **Prof. Dr. Yechezkel Barenholz,** Professor Emeritus, Head of Membrane and Liposome Research Lab, Hebrew University Hadassah Medical School, Jerusalem (IL)
- **Prof. Dr. Dr. Twan Lammers,** Institute for Experimental Molecular Imaging, RWTH, Aachen (DE)
- **Prof. Dr. med. Dong Soo Lee, Ph.D**., Chairman, Department of Nuclear Medicine Seoul National University, Seoul (KOR)
- **Dr. med. h.c. Beat Löffler, MA,** CEO, CLINAM Foundation, Basel (CH)
- **Prof. Dr. Gert Storm,** Institute for Pharmaceutical Sciences, Utrecht University, Utrecht (NL)
- **Prof. Dr. Dr. h.c. Viola Vogel,** Head of the Laboratory of Applied Mechanobiology, Department for Health Sciences and Technology (HEST), ETH, Zürich (CH)
- **PD Dr. Peter van Hoogevest**, Member of the Scientific Advisory Council, Phospholipid Research Center, Heidelberg (DE)
- **Prof. Dr. med. Christoph Alexiou**, University Hospital Erlangen (DE)
- **Prof. Dr. med. Raymond Schiffelers**, Professor of Nanomedicine; Division LAB CDL Research; UMC Utrecht; Chairman of the ETP Nanomedicine Executive Board, Utrecht (NL)
- **PD Dr. habil. Simon Drescher,** Managing Director, Phospholipid Research Center, Heidelberg (DE)
- **Prof. Dr. Theresa Allen,** University of Alberta, University of British Columbia and Organizer of the Lipid Research Days 2022, Vancouver (CAN)
- **Prof. Dr. Pieter Cullis.** Professor of Biochemistry, University of B.C. (UBC) Vancouver, Cofounder of Acuitas Therapeutics, lipid nanoparticle technology, Vancouver (CAN)
- **Dr. Martin Bornhöft,** Head of the International Association for Pharmaceutical Technology (APV), Mainz (DE)

Introduction

The nonprofit European Foundation for Clinical Nanomedicine will have after two virtual summits in 2020 & 2022 its 14th Summit as a hybrid event with personal attendance and in live stream. CLINAM 14 /2023 is the unique traditional platform with a scientific programme that will elucidate the state of the art of nanomedicine in production, development and the clinic for prevention, diagnosis and therapy. Since the development of mRNA vaccines based on lipid nanoparticles, nanomedicine has received huge awareness and has matured to a boosting field with highest recognition. This is the right moment to review the development of the technology as well as looking at the products and their use in clinical medicine at patient's bed. The achievement of the revolutionary protective wall against COVID-19 by mRNA vaccines predicts a profound acceleration of innovative drug development to the benefit of patients. However, not for all humankind: How can we enable and improve health care in countries where therapy until today is unaffordable or absent? For this, delivery of drugs by different nanoparticles shall be an important issue. All stakeholders in the field, including many high-ranking scientists, this year two Nobel Laureates, and leading managers and regulatory authorities from all continents exploit the CLINAM-summit since 15 years for new projects and making bonds for cooperation. All speakers contribute to an excellent scientific outlook. For 2023, CLINAM addressed three outstanding organizers of renowned conferences and invited them to participate with a session within the CLINAM Summit. The different skills of the parties will give a unique interdisciplinary perspective on nanomedicine and related fields in Europe and on the International level. The international Regulatory Authorities shall have their IPRP Meeting during the Summit.

Format of the Meeting

The Summit will take place on the Novartis Campus in Basel, which is since last year open to the public. The summit shall take place in the 2 auditoria, which are located in the impressive building designed by the architect Frank Gehry. The exhibition, poster presentations and lunches will be in the two Foyers of the halls. The CLINAM Team will organize the meeting with as few as possible hurdles for the participants and is grateful for the support that Novartis gives by making the halls available to CLINAM without influencing in any way the Summit itself.

Target Audience

The faculty includes pioneers and opinion leaders in medicine, nanoscience, and targeted medicine, physicians and scientists with a background in pharmacology, biology, physics, chemistry, biophysics, medicine, materials science, and engineering. Industry members find contacts for cooperation, get insight into the novel concepts

and meet keen investigating startups, interested in working together. Developers from the pharmaceutical industry present their recent findings and research. The meeting is a particularly useful source of knowledge for the targeted medicine and delivery community. The conference is also of interest to members of the regulatory authorities as well as policymakers, all experts from industry in the field of life sciences, developers of new tools and materials for nanomedicine, and all those investigating the potential of emerging technologies in the field of healthcare and their combinations. Experts from venture companies can acquire knowledge on existing and upcoming developments and novel products in the establishing field of nanomedicine and knowledge-based medicine. Government authorities can profit from the international regulator's sessions. CLINAM is a worldwide melting pot for experts and a high-level communication platform where you meet those striving for nanomedical advancement and goals.

Sponsors

Novartis Pharma Ltd., Basel (CH), **Polymun Scientific Immunbiologische Forschung** GmbH, Klosterneuburg (AT), **Swiss Nanoscience Institute** at the University Basel, Basel (CH), **NanoFCM Co., Ltd,** Nottingham (UK) **Resistell Ltd,** Muttenz (CH), **Lipoid AG,** Steinhausen (CH), **ARDENA**, Oss (NL), **PRECISION NANOSYSTEMS**, Vancouver, BC (CND), T**ECOmedical AG**, Sissach (CH), **National Centre of Competence in Research, Molecular Systems**, Basel (CH), **Helmholtz Institute for Pharmaceutical Research** Saarland (HIPS) (DE) **The Canton of Basel-Stadt**, Basel (CH), **The Canton of Basel-Landschaft**, Liestal (CH), **Freiwillige Akademische Gesellschaft** (FAG), Basel (CH), **Isaac Dreyfus-Bernheim Foundation**, Basel (CH), **European Materials Research Society** (EMRS), Strasbourg (F), **Phospholipid Research Center**, Heidelberg (DE) **InnoMedica Holding AG**, Marly (CH), **EMPA** Materials & Technology, St.Gallen (CH), , **PRNANO,** Andover, MA (USA), **CordenPharma International**, Basel (CH) **IZON, LTD (EMEA),** Lyon (FR) **, AstraZeneca, Cambridge (UK) L. + Th. La-Roche-Stiftung, Basel, Lonza Biologics (CH) ….**and further sponsors

Programme **(Update July 2023)**

All events on Sunday are at Hotel Marriott, Messeplatz, Basel

Sunday, October 9, 2023

15:30 **General Assembly of the International and European Societies for Nanomedicine**

17.30 **Board Meeting of the Journal Precision Nanomedicine (PRNANO), Official Journal for Nanomedicine**

19.15 **Aperitif and light Dinner for all arrived Speakers, Chairpersons and invited guests at Hall Helvetia**

All events on Monday, Tuesday and Wednesday are at the Novartis Campus, Basel

Monday, October 9, 2023 **(All Day Plenary Session except for 2 Parallel Sessions)**

Hall 1
Monday, 08.30 – 08.45
1. Opening

08.30 **Welcome on behalf of the CLINAM-Foundation**
Dr. med. h.c. Beat Löffler, MA, CEO, European Foundation for Clinical Nanomedicine, Basel (CH)

Hall 1
Monday, 08.45 – 09.10
2. Scientific Introduction of the Summit 2023

About A Status on the Worldwide Development of Nanomedicine for Global Health

08.45 **Worldwide Early Interventions with Nanomedicine**
Prof. Dr. med. Patrick Hunziker, President of the International Society for Nanomedicine; CSO of the CLINAM-Foundation, Deputy Head of the Intensive Care Clinic of the University Hospital Basel , Basel (CH)

09.05 **Questions and Debate**

Hall 1
Monday, 09.15 - 10.00 (keynote lecture)
3. Novel Research and Development for the Future of Life (Nobel Laureate Intervention)
Chair **Prof. Dr. Scott McNeil,** Head, Nanopharmaceutical and Regulatory Science Group, Department of Pharmaceutical Sciences, University of Basel, Basel (CH)

About Specific structural features, located mainly on the periphery of ribosomes related to genetic diseases, as well as of antibiotics-resistant pathogens, are being used as locations for targeted next generation therapeutics.

09.10 **From Origin of Life to Next Generation Therapeutics**
Prof. Dr. Ada Yonath, Nobel Laureate, Weizmann Institute of Science, Structural Biology Department, Rehovot (IL)

9.45 **Questions and Debate**

10.00 **Break**

Hall 1
Monday, 10.30 - 12.30
4. Cancer Nanomedicine **(13' Speech and 2' Questions)**
Chair **Prof. Dr. Gert Storm,** Institute for Pharmaceutical Sciences, Utrecht University, Utrecht (NL)

About Cancer nanomedicine is the best way to overcome the shortcomings of conventional cancer diagnostics and therapies.

10.30 **The Triple Effect of the Neoadjuvant Immunotherapy Revolution: More Cures, Shorter Treatments, Less Surgery**
Alexander M.M. Eggermont, MD, PhD Chief Scientific Officer, Board of Directors Professor Clinical & Translational Immunotherapy, UMCU, Utrecht University (NL), Board Comprehensive Cancer Center München (DE)

10.45 **The Role of PET and Radionuclide Therapy in Cancer Immunotherapy**
Prof. Dr. med. Andreas Kjaer, PhD, DMSc, Professor, chief physician , Department of Clinical Physiology, Nuclear Medicine & PET, Rigshospitalet, University of Copenhagen (DK)

11.00 **Combating Cancer with the Immune System**
Prof. Dr. Jérôme Galon, Director of Research at INSERM (French NIH), Head of the laboratory of Integrative Cancer Immunology, First class Research Director (DR1) at Institut National de la Santé et de la Recherche Médicale (INSERM), Paris (FR)

11.15 **3D-bioprinted Cancer Models for Personalized Therapy of Nanomedicines**
Prof. Ronit Satchi-Fainaro, Professor of Pharmacology - Tel Aviv University; Head - Cancer Research and Nanomedicine Lab; Director - Cancer Biology Research Center; Director at BoD Teva Pharmaceutical industries; Member at 8400 - The Health Network, Tel Aviv University (IL)

11.30 **Precision Arterial Doxorubicin Drug Delivery and Treating Soft Tissue Tumors: Long-term Follow-up**
Dr. med. Eldad Elnekave, Director Interventional Oncology Clinic, Davidoff Cancer Institute & Radiology Department, Rabin Medical Center, Chief Medical Officer, Zebra Medical Vision, LTD, Tel Aviv (IL)

11.45 **Drug Co-encapsulation in Lipid Nanoparticles for a Multimodality Approach to Cancer Therapy**
Prof. Dr. med. Alberto A. Gabizon, Ph.D., Director, Center of Nano-oncology, Shaare Zedek Medical Ctr. Professor of Oncology, Hebrew University-School of Medicine, Jerusalem (IL)

12.00 **Establishing a Patient-derived Glioblastoma Organoids Model that Mimics Tumor Heterogeneity in Patients**
Dr. Peter Wick, Head of the Laboratory for Particles-Biology Interactions, Empa, St. Gallen (CH)

12.15 **Questions and Debate**

12.30 **Lunch**

Hall 1
Monday, 13.30 -15.00
5. The Overall Progress in the Field of Non-Biological Complex Drugs (NBCDs); Past Successes, Future Opportunities and Remaining Challenges
Chair **Dr. Jon de Vlieger,** Coordinator of the Non-Biological Complex Drug Working Group, Strategy Director at Lygature, Utrecht (NL)

About For almost a decade the NBCDs have been part of the CLINAM discussions. This session now brings together the experience and lessons learned in the past decade, the developments in the field of new drug modalities, and the remaining open challenges to be addressed by the nanomedicine community. Topics will include stability of LNPs, manufacturing and upscaling challenges, discussions on active ingredient vs excipients and development of new modalities. The session aims to end with a lively debate to stimulate further thinking on potential ways to further unlock the nanomedicine potential worldwide.

13.30 **Introduction and Overview of 10yrs NBCD Discussions**
Dr. Jon de Vlieger, Coordinator of the Non-Biological Complex Drug Working Group, Strategy Director at Lygature, Utrecht (NL)

13.45 **The Storage and In-Use Stability of mRNA Vaccines and Therapeutics: Not A Cold Case**
Prof. Dr. Daan J.A. Crommelin, Professor em. of the Department Pharmaceutics, Utrecht Institute for Pharmaceutical Sciences, UIPS , Utrecht (NL)

14.00 **Are LNPs Drug Substance or Drug Products? A Recent Review of Regulatory Approvals**
Prof. Dr. Scott McNeil, Professor of Nanopharmaceutical and Regulatory Science, University of Basel (CH)

14.15 **Recent Developments at the European Pharmacopeia Related to Complex Drugs, including mRNA LNPs**
Prof. Dr. Gerrit Borchard, Professor in Biopharmaceutics at the University of Geneva, Geneva (CH)

14.30 **Design & Development of Drug Dendrimer Conjugate**
Prof. Dr. Marianne Ashford, Senior Principal Scientist, AstraZeneca Advanced Drug Delivery; Pharmaceutical Sciences, R & D, Macclesfield, Cheshire (UK)

14.45 **Questions and Debate**

Hall 1
Monday, 15.00 - 15.40
6. Graphene in Nanomedicine **(13' Speech and 2' Questions)**
Chair **Dr. Peter Wick,** Head of the Laboratory for Particles-Biology Interactions, EMPA, St. Gallen (CH)

About Carbon nanomaterials offer a rich toolbox of opportunities for translation in various application areas. A perspective of the unique properties and their combination that carbon nanomaterials offer for application in medicine.

15.00 **Probing Immunological Interactions of Two-dimensional (2D) Nanomaterials: Graphene and Beyond**
Prof. Dr. med. Bengt Fadeel, Ph.D., A.T.S. Division of Molecular Toxicology, Institute of Environmental Medicine, Karolinska Institutet, Stockholm, (S)

15.15 **Biomedical Applications of Carbon Nanotechnology**
Prof. Dr. Kostas Kostarelos, Professor and Chair of Nanomedicine, Faculty of Biology, Medicine & Health, University of Manchester, Manchester (UK) and Severo Ochoa Distinguished Professor, Catalan Institute of Nanoscience and Nanotechnology (ICN2), Barcelona (ESP)

15.30 **Questions and Debate**

15.45 **Break**

Hall 1
Monday, 16.15 - 17.45
7. The Use of Novel Nanotherapies in Infection, Inflammation and Chronic Pain **(18' Speech and 2' Questions)**

Chair **Prof. Dr. med. Patrick Hunziker**, CSO of the CLINAM-Foundation; Deputy Head of the Intensive Care Clinic of the University Hospital Basel and Head of the CLINAM-Lab, Basel (CH)

About The recent pandemic has demonstrated, that infectious diseases are still a major threat to human health and society. Apart from viruses, bacterial infection might become even more dangerous because of the increasing problem of antimicrobial resistance. In order to tackle those challenges, not only novel anti-infectives beyond classical antibiotics are needed, but also innovative technologies to deliver those molecules across various biological barriers. Besides the immune system and epithelial tissues, those also include biofilms and the bacterial cell envelope.

16.15 **Nanomedicine for Cancer and Chronic Pain**
Prof. Dr. Nathalie Pinkerton, the Pinkerton Research Group, NYU Tandon School of Engineering, Brooklyn, NY /USA)

16.35 **Inflammation and Pain: Novel Nanotherapies**
Prof. Dr. Patrick Couvreur, University Paris-Saclay, Institut Galien, UFR de Pharmacie, Orsay (FR)

16.55 **Overcoming Biological Barriers in Infectious Diseases**
Prof. Dr. Claus-Michael Lehr, Head of the Helmholtz Institute for Pharmaceutical Research Saarland (HIPS-HZI) and Saarland University, Saarbrücken, (DE)

17.15 **Cellular Nanoparticles for Antibacterial Therapy and Vaccination**
Prof. Dr. Liangfang Zhang, Department of Nanoengineering, Director, Chemical Engineering Program, University of California San Diego (USA)

17.35 **Questions and Debate** (10')

Hall 2
Monday, 13.30 - 15.45 and 16.15 -17.45
8. CLINAM Posters - Small Speeches (Separate Hall)

Chair **Dr. Sc. nat. Ruth Schmid,** Former Vice President Marketing, SINTEF Industry, Biotechnology and Nanomedicine, Polymer Particles and Surface Chemistry, Trondheim (NO)

About Selected poster submitters have in this session the chance to explain their work in short speeches of 4 - 5 minutes. They highlight in addition research activities in nanotechnology, targeted delivery and precision medicine at their premises. List of speaker will be presented in September.

Separate room for members and live and with virtual attendance
Monday, Tuesday, Wednesday; 1-3 h sessions
9. Closed IPRP (International Pharmaceutical Regulators Programme (upon invitation only)
During all Summit Days Meeting-Blocks of the Experts are scheduled

Hall 1
Monday, 17.45-19.00
10. Late Breaking Trials and Developments **(12' plus 3' Questions; Talk 20'plus 5' Questions)**

Chair **Prof. Dr. med. Simo Schwartz Jr PhD,** Head of Research and Innovation, Clinical Biochemistry Department, Hospital Universitari Vall d'Hebron, Strategy Director of Biobanking and Bioresources, Vall d'Hebron Hospital Barcelona Campus, Barcelona (SP)

About This session is dedicated to the current trends and challenges in the clinical translation of Nanomedicine as well as the potential pathways for translational development and Commercialization. The speakers present late breaking and ongoing trials.

17.45 **Development of Promitil®, a Lipidic Prodrug of Mitomycin c in Pegylated Liposomes: From Bench to Bedside**
Prof. Dr. Alberto A. Gabizon, Ph.D., Director, Center of Nano-oncology, Shaare Zedek Medical Ctr. Professor of Oncology, Hebrew University-School of Medicine, Jerusalem (IL)

18.00 **Normalization of Tumor Microenvironment by Liposomal Delivery of "Normalizing" Agents to Tumors Improving Dramatically Therapeutic Efficacy of Checkpoint Inhibitors**
Prof. Dr. Yechezkel Barenholz, Professor Emeritus, Head of Membrane and Liposome Research Lab, Hebrew University Hadassah Medical School, Jerusalem (IL)

18.15 **Clinical Nanomedicine Strategies to Develop Tumor Agnostic Therapies in Cancer**
Dr. Neil Desai, Founder, Executive Chairman and former CEO, Aadi Bioscience Inc., Pacific Palisades, CA (USA)

18.30 **Nano Goes ICU: Hepatocellular Targeting of PI3K-Signaling in Sepsis to Restore Liver Function**
Jun-Prof. Dr. Adrian T. Press, Molecular Medicine of Life-Threatening Infections, Jena University Hospital, Department of Anesthesiology and Intensive Care Medicine, Jena (DE)

18.45 **Questions and Debate**

19.00 **End of Day**

19.25 **Separate Tramway for all Guests to the Evening Event at the Hotel Mövenpick (Central Station SBB)**

19.45 **Apéritif**

20.15 **Brokerage- and Network-Dinner with Cultural Intermezzos and presentation of the 2023 CLINAM Dwarf Award**

23.15 **End of Day 1**

Tuesday, October 10, 2023 (Parallel Sessions and Plenary Parts in Hall 1)

Hall 1
Tuesday, 8-30 - 10.30
11. Polymeric Micelles: Preclinical Progress and Clinical Translation **(13' plus 2' Questions; Talk 20'plus 5' Questions)**
Chair **Prof. Dr. Dr. Twan Lammers,** Institute for Experimental Molecular Imaging, RWTH Aachen, Aachen (DE) **and Dr. Cristianne J. F. Rijcken,** PharmD, PhD, Founder and CSO, Cristal Therapeutics, Maastricht (NL)

About Polymeric micelles are extensively explored as carrier materials for delivering drugs to pathological sites. Many different types of polymeric micelles have been designed and evaluated over the years, and about a dozen of them have been evaluated in patients. This session brings together experts in polymeric micelle design, development and clinical translation, and aims to set the stage for discussing future directions and applications of polymeric micelles for targeted drug delivery.

08.30 **Polymeric Micelle Clinical Translation**
Prof. Dr. Kazunori Kataoka, Director General, Innovation Center of NanoMed, Professor Emeritus, University of Tokyo, Tokyo (JP)

08.55 **Polymeric Micelles vs. Polymer Conjugates**
Prof. Dr. María J. Vicent, Head of Polymer Therapeutics Lab. and Coordinator of Advanced Therapies Area at Centro de Investigación Príncipe Felipe, Valencia (ES)

09.10 **All-PHPMA Polymeric Micelles**
Prof. Dr. ir. W.E. (Wim) Hennink, Division of Pharmacology, Utrecht University, Utrecht (NL)

09.25 **High-Capacity Polymeric Micelles**
Prof. Dr. Robert Luxenhofer Professor, Department of Chemistry, Helsinki Institute of Sustainability Science (HELSUS), Helsinki (FIN)

09.40 **Monitoring Polymeric Micelle Tumor Targeting**
Prof. Dr. Dr. Twan Lammers, Institute for Experimental Molecular Imaging, RWTH Aachen, Aachen (DE)

09.55 **Translational Lessons Learnt**
Dr. Cristianne J. F. Rijcken, PharmD, PhD, Founder and CSO, Cristal Therapeutics, Maastricht (NL)

10.10 **Questions and Debate**

10.30 **Break**

Hall 2
Tuesday, 08.30 - 10.30
12. The Surprising Role of Monoacyl Phospholipids (lysolipids) in Drug Delivery, Medicine, and beyond
A session in Collaboration with the Phospholipid Research Center, Heidelberg (DE) **(17'talk and 3' first questions)**
Chair **PD Dr. habil. Simon Drescher, Managing Director, Phospholipid Research Center, Heidelberg (DE)**

About Phospholipids are already included in numerous approved drug products, but their potential is far from exhausted: Phospholipids are extremely well tolerated, and their capabilities go far beyond those of conventional emulsifiers or solubilizes. The two vaccines against COVID-19 based on lipid nanoparticles (LNPs) are a striking example in this respect. When we talk about phospholipids, or more precisely diacyl phospholipids, we must always expect to find monoacyl phospholipids (MAPCs) as well. MAPCs, also known as lysolipids, differ from diacyl phospholipids in terms of their physicochemical characteristics, physiological role, and application. Therefore, despite having the negative reputation of being lytic to erythrocytes, this subgroup offers many positive properties. The goal of this workshop is to introduce the audience to the characteristics of lysolipids, starting with their physicochemical properties, their role

within cancer, their usefulness in stabilizing pharmaceutically used proteins, and ending with their applicability in various drug delivery systems.

08.30 **Introduction Phospholipid Research Center**
PD Dr. habil. Simon Drescher, Managing Director, Phospholipid Research Center, Heidelberg (DE)

08.35 **Phospholipids as Nanomaterials**
PD Dr. Peter van Hoogevest, CEO PHARMANOVATION .and Member of the Scientific Advisory Council of the Phospholipid Research Center, Heidelberg (DE)

08.40 **The Lysolipids Paradox**
Prof. Dr. Heiko Heerklotz, BIOSS and Institute of Pharmaceutical Sciences, University of Freiburg i. Br. (DE)

09.00 **Stabilization of Lyso-phosphatidylcholine-levels in Patients with Cancer**
Prof. Dr. Ulrich Massing, Professor of Pharmaceutical Sciences, University of Freiburg i. Br. (DE)

09.20 **Lyso-phosphatidylcholine for the Stabilization of Pharmaceutical Proteins against Adsorption and Aggregation**
Prof. Dr. Wolfgang Frieß, Chair of Pharmaceutical Technology and Biopharmaceutics, Ludwig-Maximilians-University, München (DE)

09.40 **Elucidating the Use of Lyso-phospholipids in Oral Self-nanoemulsifying Drug Delivery Systems**
Prof. Dr. Anette Müllertz, Professor, Department of Pharmacy, Faculty of Health and Medical Sciences, Technical University Copenhagen (DK)

10.00 **Lecithin and Monoacyl Lecithin as Interacting Excipients in Oral bio-enabling Formulations of Poorly Water-soluble Drugs**
Prof. Dr. Martin Kuentz, University of Applied Sciences and Arts Northwestern Switzerland, Muttenz (CH)

10.20 **Last Questions and Debate**

10.30 **Break**

Hall 1
Tuesday, 11.00 -12.40
13. Lipid Nanoparticles: Changing the Future of Medicine
A Session in collaboration with the Lipid Research Days, Vancouver, Canada

Chair **Prof. Dr. Theresa Allen,** University of Alberta, and University of British Columbia and Organizer of the Lipid Research Days 2022, Vancouver (CAN)

About Recent advances in nucleic acid and drug delivery technologies are catalyzing rapid changes in the biotechnology and pharmaceutical industries on a global scale, enabling personalized medicines, new treatments for rare and undefeated disease and the promise of less expensive treatments for diseases in under-developed countries. This session brings together international experts whose work has been seminal to the development and clinical approval of novel nanomedicines to discuss some ways that nanomedicine will contribute to the changing future of medicine.

11.00 **Rational Design of Lipid Nanoparticles for in Vivo Delivery of mRN**
Prof. Dr. Pieter Cullis. Professor of Biochemistry, University of B.C. (UBC) Vancouver, Cofounder of Acuitas Therapeutics, lipid nanoparticle technology, Vancouver (CAN)

11.15 **The quest for next generation lipid nanoparticles for cell-specific delivery of mRNA**
Prof. Dr. Gaurav Sahay, Associate Professor in the Department of Pharmaceutical Sciences, College of Pharmacy at Oregon State University, Corvallis, OR (USA)

12.30 **Lipid Nanoparticles Enable Next Generation mRNA-based Medicine**
Dr. Ying K. Tam, M.Sc., Ph.D. Chief Scientific Officer of Acuitas Therapeutics, Vancouver (CAN)

11.45 **Development of Selective Organ Targeting (SORT) Lipid Nanoparticles (LNPs) for the Correction of Disease Causing Mutations**
Prof. Dr. Daniel J. Siegwart, Professor, W. Ray Wallace Distinguished Chair in Molecular Oncology Research, Department of Biomedical Engineering, University of Texas Southwestern Medical Center, Dallas (USA)

12.00 **Advancing Lipid Nanoparticles for Safe and Efficient Nucleic acid Delivery to Extrahepatic Tissues**
Dr. Dominik Witzigmann, Chief Executive Officer and Co-founder NanoVation Therapeutics, Vancouver, BC, (CAN)

What can be learned from Blank Lipid Nanoparticles: A Closer Look
12.15 **Prof. Dr. Advait Badkar,** Executive Director- Drug Product Design & Development- Head Nanoparticle Development, BioTherapeutics Pharmaceutical Sciences, Worldwide Research & Development, Pfizer, Inc., Andover, MA (USA)

12. 30 **Questions and Debate**

12.40 **Lunch**

Hall 2
Tuesday, 11.00 -12.40
14. Nanoparticle Based Formulations against AMR (12' speech / 3' questions)
Chair **Prof. Dr. Yechezkel Barenholz,** Head of Membrane and Liposome Research Lab Hebrew University, Hadassah Medical School, Jerusalem (IL)

About Microbial resistance kills people and impedes control of infectious diseases, damages trade and economies. Has Nanomedicine got in store novel approaches for a new type of drugs for the treatment of infections caused by resistant bacteria? And are there, besides this, other pathways to go against AMR?

11.00 **Anatomical and Cellular Barriers for Targeting Pathogens in Rodent and Human Tissues**
Prof. Dr. Dirk Bumann, Center for Molecular Life Sciences, Biozentrum, University of Basel (CH)

11.15 **Antimicrobial Resistance Research and Development Funding across the Entire Value Chain**
Dr. Ralf Sudbrak, Senior Scientific Programme Officer Global AMR R&D Hub, Berlin (DE)

11.30 **Bacterial Nanomotions Combined with Supervised Machine Learning, Accurately Classify Antibiotic Susceptibility**
Dr. Alexander Sturm, CSO, Resistell AG, Muttenz (CH)

11.45 **Novel Nanodrugs Overcoming AMR**
Prof. Dr. Yechezkel Barenholz, Hebrew University, Hadassah Medical School, Jerusalem (IL)

12.00 **Is there a Valid Business Model in AMR in Today's Market Environment?**
Dr. Marc Gitzinger, Founder, Board Member & CEO, BioVersys, Basel (CH)

12.15 **Inorganic Antimicrobials - Nanozymes Combat Bacteria Hiding within Macrophages**
Prof. Dr. Inge Herrmann, Department of Mechanical and Processing Engineering, Nanoparticle Systems Engineering Lab, ETH Zurich, Zurich (CH)

12.30 **Questions and Debate**

12.40 **Lunch**

Hall 1
Tuesday, 13.40 - 15.30
15. Pharmaceutical Product Design, Development and Manufacturing Insights (APV)
A Session in Collaboration with the International Association for Pharmaceutical Technology (APV), Mainz (DE)

Chair **Dr. Bernd Riebesehl,** Executive Director TPPM, Project Head TRD & PHAD Innovation Committee Novartis Leading Scientist, Novartis Campus, Basel (CH)

About We are witnessing now more diverse therapeutic modalities enriching the pharmaceutical product landscape diagnosing or treating unmet medical needs. This session shall feature insights into nanomedicine product design as it addresses unmet drug delivery and patient needs. Also insights into process design and insights for GMP manufacturing will inspire peers.

13.40 **LNP-production for mRNA-vaccines, Therapeutics and for Gene-editing – Proof of Concept for a Versatile Process**
Dr. Andreas Wagner, PPA. Head Liposome Technology, Polymun Scientific Immunbiologische Forschung GmbH, Klosterneuburg (AT)

13.55 **Investigations into mRNA LNP shelf Life Stability**
Dr. Michael Keller, Senior Principal Scientist, Pre-Clinical CMC Pharma Research and Early Development Roche Innovation Center Basel, Basel (CH)

14.10 **Harnessing the Power of Radioactive Isotopes to Treat Patients**
Dr. Lorenza Fugazza, Head TRD Radio Ligando Therapy, Novartis, Basel (CH)

14.25 **Challenges in Oral Nanoformulation Prediction by Physiologically based Biopharmaceutics Modelling (PBBM)**
Dr. Martin Hingle, Early Phase Product Development, Technical Research and Development, Novartis Pharma AG, Basel (CH)

14.40 **Poloxamers – Individual, Versatile & Safe**
Dr. Meike Maria Roskamp, Development Pharma Solutions, BASF SE, Ludwigshafen (DE)

14.55 **Development of Effective and Safe RNA-LNP Medicines for the Clinic**
Dr. Lloyd Jeffs, Sr. Director of BioPharma Services, Precision NanoSystems, Vancouver (CAN)

15.10 **Questions and Debate**

15.30 **Break**

Hall 2
Tuesday, 13.40 - 15.30
16. Chemistry in or Inspired by Living Systems: From Novel Chemical Tools to Improved Nanomedicine
A Session in Collaboration with the German Research Foundation (DFG) established "Collaborative Research Center on Nanodimensional Polymer Therapeutics for Tumor Therapy" organized by the CRC/SFB, Johannes Gutenberg University, Mainz (DE)

Chair **Prof. Dr. Matthias Barz**, Professor for Bio-pharmacy, Leiden Academic Center for Drug Research (LACDR), Leiden University, (NL) and **Prof. Dr. Lutz Nuhn,** Chair of Macromolecular Chemistry, Institute of Functional Materials and Biofabrication, Faculty of Chemistry and Pharmacy, Julius-Maximilians-University Würzburg, Würzburg (DE)

About The control of chemical reactivity, self-assembly and response mechanisms in small or macromolecules plays an important role in life, but is also entering the spotlight for establishing the next generation nanoparticle-based therapies. In this session, we aim to present some latest developments in the areas of bioorthogonal chemistry and life-like nanosystems in nanomedicine.

13.40 **Next-Level Chemical Tools for Bioorthogonal Click-to-Release**
Prof. Dr. Hannes Mikula, Professor of Chemical Biology, Institute of Applied Synthetic Chemistry, TU Vienna, Vienna (AT)

13.55 **In Vivo Click Chemistry as Novel Tool in Immunology**
Sander van Kasteren, Professor of Molecular Immunology, Leiden University (NL)

14.10 **Nanomaterials Communicating with Cells**
Prof. Dr. Tanja Weil, Scientific Member and Director at the Max Planck Institute for Polymer Research, Ulm (DE)

14.25 **Synthetic Biomolecular Condensates**
Prof. Dr. Lu Su, Assistant Professor Science, Leiden Academic Centre for Drug Research LACDR/Drug Delivery Technology, Leiden (NL)

14.40 **Synthetic Transcription Factors**
Prof. Dr. Sebastian Pomplun, Assistant Professor - Drug Discovery Leiden University and Max-Planck Institute for Psychiatry The Hague (NL)

14.55 **Chemical Evolution of Amphiphilic Xenopeptides for Cas9 Ribonucleoprotein Delivery**
Prof. Dr. Ulrich Lächelt, Assistant Professor for Preclinical Medicines Development, Group Leader Intracellular Drug Delivery. Department of Pharmaceutical Sciences, University of Vienna (AT)

15.10 **Questions and Debate**

15.30 **Break**

Hall 1

Tuesday, 16.00 - 17.10

17. Immune-mediated and Related Disorders: Rare and Neglected Diseases, Immunotherapy, Novel Immune Technologies **(9'Speech and 1' First Questions)**

Chair **Dr. Marina A. Dobrovolskaia Ph.D., MBA, PMP,** Director of Operations Head of Immunology Section, Nanotechnology Characterization Laboratory, Frederick (USA)

About Alterations in the structure and function of the immune system are needed for the host's adaptation to changing environment and response to pathogens but may also lead to diseases affecting both the immune and other systems in the body. This session will discuss cutting-edge research pertaining to undesirable immune activation (e.g., hypersensitivity reactions and CARPA in response LNP-mRNA vaccines), desirable immunomodulation (e.g., nanoparticle-mediated change in the tumor microenvironment for therapeutic purposes), and increasingly complex landscape of methodologies for assessing nanoparticles interactions with the immune system. It will also discuss the role of nanomedicines in the therapy of rare and neglected diseases.

16.00 **Assessing Nanoparticles Immunotoxicity in the 21st Century: Cells, Animals and beyond**
Dr. Marina A. Dobrovolskaia Ph.D., MBA, PMP, Director of Operations Head of Immunology Section, Nanotechnology Characterization Laboratory, Frederick (USA)

16.10 **NC6300 Nanomedicine Modulates the Tumor Microenvironment and Improves the Efficacy of Immunotherapy**
Dr. Fotios Mpekris, Physics/Mechanical Engineering Post-Doctoral Fellow and Lecturer, Cancer Biophysics Laboratory, University of Cyprus (CYP)

16.20 **The Nanostructure and Anaphylactic Reactogenicity of the Covid-19 mRNA-LNP Vaccine, Comirnaty: New findings and concepts**
Prof. Dr. med. Janos Szebeni, PhD, Semmelweis University, Dept. of Translation Medicine, Nanomedicine Section, Budapest (HUN)

16 30 **The Worldwide Impact of Nanomedicines for Rare and Neglected Diseases**
Prof. Dr. med. Anthony A. Attama, Drug Delivery and Nanomedicines Research Laboratory, Department of Pharmaceutics, Faculty of Pharmaceutical Sciences, University of Nigeria, Nsukka, Institute for Drug-Herbal Medicine-Excipient Research and Development, University of Nigeria, Nsukka (NGA)

16.40 **The Nanoprimer: a Significant Opportunity to Boost the Efficacy of Cancer Vaccines**
Dr. Julie Devallière, Biology Team Leader, Curadigm SAS, Paris (F)

16.50 **Questions and Debate**

17.10 **Short break to get together in Hall 1 for Plenary Sessions**

Hall 2
Tuesday, 16.00 - 17.10
18. COVID, mRNA and Beyond

Chair **Dr. Heinrich Haas,** Department of Biopharmaceutics and Pharmaceutical Technology Johannes Gutenberg-Universität, Mainz, Mainz, (D)

About With the successful application of messenger RNA-based vaccines against Covid-19, the terms 'LNPs' and 'mRNA' have entered common language use, not only in a wider scientific community, but also in public. This great breakthrough boosted as well development of mRNA nanomedicines for application in other therapeutic or preventive settings. Here, further to existing LNPs, tailored nanoparticles and improved control strategies may be required. In this session, mRNA nanomedicine technologies for applications to combat Covid-19 and beyond will be discussed

15.50 **Engineering of Improved RNA Nanoparticle Systems by Controlled Self-Assembly**
Dr. Heinrich Haas, Department of Biopharmaceutics and Pharmaceutical Technology Johannes Gutenberg-Universität, Mainz, Mainz, (D)

16.00 **BNT211: A Phase 1 Trial Evaluating Safety and Efficacy of CLDN6 CAR-T Cells and CARvac-mediated in vivo Expansion in Patients with CLDN6-positive Advanced Solid Tumors**
Dr. Dr. Benjamin Rengstl, Director Clinical Development & Immunoreceptor Therapy BioNTech SE, BioNTech Cell & Gene Therapies, Mainz (DE)

16.10 **Nanotechnologies for COVID and Beyond**
Professor Dr. Moein Moghimi, Professor of Pharmaceutics and Nanomedicine, School of Pharmacy, and Translational and Clinical Research Institute, Newcastle University, Newcastle upon Tyne (UK); and Adjoint Professor, Skaggs School of Pharmacy and Pharmaceutical Sciences, and Colorado Center for Nanomedicine and Nanosafety, University of Colorado Anschutz Medical Campus, CO (USA)

16.20 **Characterization of Quality Attributes of Nanovaccines for COVID-19**
Dr. Luigi Calzolai, Project Leader –Unit F2 Technologies for Health, European Commission Directorate General Joint Research Centre Directorate F – Health and Food, Ispra (VA) (IT)

16.30 **In Use Stability of COVID-19 Vaccines**
Prof. Dr. Daan J.A. Crommelin, Professor em. of the Department Pharmaceutics, Utrecht Institute for Pharmaceutical Sciences, UIPS, Utrecht (NL) (TBC)

16.40 **Interactions of Corona Proteins with Cell Receptors and Nanoparticle Uptake Mechanisms for Targeting**
Prof. Dr. Anna Salvati Department of Nanomedicine & Drug Targeting, Groningen Research Institute of Pharmacy (GRIP), University of Groningen, Antonius Deusinglaan 1, 9713 AV Groningen, The Netherlands.

16.50 **Questions and Debate**

17.10 **Short break to get together in Hall 1 for 2 Plenary Sessions**

Hall 1
Tuesday 17.20 - 18.10
19. Advancing the Development of Novel Bioconjugate-based Therapies: Translating Wishes Into Daily Practices

Chair **Dr. Cristianne J. F. Rijcken, PharmD, PhD**, Founder and CSO, Cristal Therapeutics, Maastricht (NL)

About Metal-free click chemistry has emerged as a powerful tool in the bioconjugation field, offering a versatile and efficient approach to the synthesis of bioconjugates without the use of potentially toxic metal catalysts. The field of bioconjugation involves the covalent attachment of two or more molecules to create a new functional entity, and is essential for many applications in areas such as drug development and diagnostics. One of the most widely used metal-free click reactions is the strain-promoted azide-alkyne cycloaddition (SPAAC), which involves the reaction between an azide and an alkyne functional group in the presence of a catalyst, such as a cyclooctyne or a bicyclononyne. SPAAC has been used to create a wide range of bioconjugates, including fluorescent probes, bioactive molecules, and antibody drug conjugates. SPAAC has sev0eral advantages over traditional metal-catalyzed click reactions, such as high selectivity, good biocompatibility, and low toxicity. Another metal-free click reaction is the tetrazine-alkene cycloaddition, which enables the selective conjugation of tetrazine-modified molecules to alkenes. This reaction has been used to create bioconjugates for imaging and drug delivery applications, and has the advantage of super-fast reaction kinetics and high biocompatibility, hence even allowing in-vivo click.

In this session, the increased applicability of metal-free click chemistry in the bioconjugation field will be addressed for the various product areas, their beneficial features as well as anticipated future developments.

17.20 **CliCr® - An Innovative Class of Metal Free Click Reagents to Enable a Broad Diversity of Bioconjugations**
Dr. Cristianne J. F. Rijcken, PharmD, PhD, Founder and CSO, Cristal Therapeutics, Maastricht (NL)

17.30 **Linkerology® - Preparing Cargos for Conjugation - A Survey from Cell-free Production of Biomolecules to Plasma Treatment of PTFE Surfaces**
Dr. Thomas Bruckdorfer, CSO & VP Business Development, Iris Biotech GmbH, Marktredwitz, (DE)

17.40 **Accelerating Bioconjugates Development: A Holistic Approach for Technology Selection and Manufacturing Integration**
Dr. Nina Hentzen, Senior Scientist, Early Development Bioconjugates, Lonza AG, Visp (CH)

17.50 **Questions and Debate**

18.10 **Short Break**

Hall 1
Tuesday 18.20 - 19.15
20. From Supramolecular Chemistry to Related Fields (Nobel Laureate Intervention)

Chair **Prof. Dan Peer,** Vice President for Research and Development, Tel Aviv University, Director, Laboratory of Precision NanoMedicine, Managing Director, SPARK Tel Aviv, Center for Translational Medicine, Tel Aviv University, Tel-Aviv (IL)

From Supramolecular towards Adaptive (Nano)-Chemistry Bioorganic and Biomedical Aspects

18.20 **Prof. Dr. Jean-Marie Lehn,** Nobel Laureate, ISIS - Université de Strasbourg, Strasbourg (F)

19.00 **Questions and Debate**

19.15 **End of s Day 2 (Tramway and Taxis)**

20.00 **Speakers Apéritif at Merian Spitz**

20.20 **Speakers Dinner at Merian Hall**

Wednesday, October 11, 2023 (Parallel Sessions and Plenary Parts in Hall 1)

Hall 1
Wednesday, 08.15 - 10.15
21. Nanocapsules and Nanoparticles Modulating the Immune System: Immunization for Tumors and Dampening Autoimmunity and Allergy
A Session in Collaboration with the German Research Foundation (DFG) established "Collaborative Research Center on Nanodimensional Polymer Therapeutics for Tumor Therapy" organized by the CRC/SFB, Johannes Gutenberg University, Mainz (DE)

Chair **Prof. Dr. med. Volker Mailänder,** Center for Translational Nanomedicine, University Medicine of the Johannes Gutenberg University Mainz (DE) **and Prof. Dr. med. Stephan Grabbe,** Director of the Department of Dermatology, Medical Center and Polyclinic, Speaker of the Research Center for Immunotherapy, Mainz (DE)

About Nanotechnology has evolved from liposomes to lipid nanoparticles to an even wider variety of carrier systems. With the success of immunizations against viruses like SARS-CoV2 it became clear that nanocapsules and nanoparticles are ideal delivery systems for influencing the immune system and delivering immunologically active agents in a hitherto unprecedented way. Beyond developing vaccines for viruses, we will focus in this session on the harder-to-achieve goal of cancer immune treatment by nanocarriers as well as suppressing unwanted immune reactions like in autoimmune diseases or allergies.

08.15 **Targeting Nanocarriers in Vivo and Maximizing Tumor Therapy Effects with Antigen/Adjuvant Combinations in Protein Nanocapsules**
Dr. rer. nat. Michael Fichter, Department of Dermatology, University Medical Center of the Johannes Gutenberg-University Mainz (DE); Max Planck Institute for Polymer Research, Mainz (DE)

08.30 **Cancer Immunotherapy gone # Viral: Plant Viruses against Cancer**
Prof. Dr. Nicole F. Steinmetz, Department of NanoEngineering, Vice Chair for Research and Faculty Affairs, Director, Center for Nano-ImmunoEngineering, (Founding Director) Co-Director, Center for Engineering in Cancer, Institute for Engineering (IEM) UC San Diego (USA)

08.45 **Employing mRNA against Cancer**
Dr. Mustafa Diken, University Medical Center Mainz, TRON and BioNTec, Mainz (DE)

09.00 **Ionizable Lipid Nanoparticles in Action & beyond Delivery**
Prof. Dr. Khuloud T. Al-Jamal FRSC, FRPharmS, FHEA, Head of Medicines Development**,** Institute of Pharmaceutical Sciene, King's College London (UK)

09.15 **Lyotropic Nonlamellar Liquid Crystalline Nanoparticles for Immunomodulation**
Professor Dr. Moein Moghimi, Professor of Pharmaceutics and Nanomedicine, School of Pharmacy, and Translational and Clinical Research Institute, Newcastle University, Newcastle upon Tyne (UK) and Adjoint Professor, Skaggs School of Pharmacy and Pharmaceutical Sciences, and Colorado Center for Nanomedicine and Nanosafety, University of Colorado Anschutz Medical Campus, CO (USA)

09.30 **Combination of Tumor Thermal Ablation, Cytokines and Lipidic Adjuvant Provide a Distal Immune Response**
Dr. Nathalie Mignet, UTCBS Lab leader, Université Paris Cité, CNRS UMR8258, INSERM U1267, Paris (FR)

09.45 **Questions and Debate**

10.15 **Break**

Hall 2

Wednesday, 08.15 - 10.15

22. Biosensors, Diagnostics, Imaging-guided Nanomedicine and Targeted Drug Delivery **(12' Speech, 3' Q.)**

Chair **Prof. Dr. med. Christoph Alexiou,** Department of Otorhinolaryngology, Head and Neck Surgery, Head Section of Experimental Oncology and Nanomedicine (SEON), Else Kröner-Fresenius-Foundation Professorship, University Hospital Erlangen (DE)

About Improved diagnostics, imaging and targeted drug delivery are important core elements of nanomedicine with the aim of providing patients with fast and individual care. In this session different aspects of diagnosis, imaging and targeted therapy will be elucidated with a focus on the latest achievements and developments in the field

08.15 **Intrathecal exosomes Brain Imaging for CSF-lymphatic Efflux and Neuroimmue Interface**
Prof. Dr. med. Dong Soo Lee, PhD, Seoul National University & Medical Science and Engineering, POSTECH Seoul/Pohang (KOR)

08.30 **Design of Transcytotic Cancer Nanocarrier: An Alternative Approach to Reach Solid Tumor Beyond the Classic EPR Effect**
Prof. Dr. Huan Meng, PhD Professor, National Center for Nanoscience and Technology (NCNST) Beijing, (CN)

08.45 **Nanomechanics in Diagnosis**
Prof. em. Dr. Christioph Gerber, Department of Physics, University of Basel, Basel (CH)

09.00 **New potential of SPIONs for Diagnostic Purposes**
Prof. Dr. med. Christoph Alexiou, Department of Otorhinolaryngology, Head and Neck Surgery, Head Section of Experimental Oncology and Nanomedicine (SEON), Else Kröner-Fresenius-Foundation Professorship, University Hospital Erlangen (DE)

09.15 **Hierarchically Organized Delivery Systems for Brain Diseases**
Prof. Dr. Paolo Decuzzi, Senior Researcher and Professor, Director, Laboratory of Nanotechnology for Precision Medicine, Italian Institute of Technology, Genova (IT)

09.30 **Generating Artificial Targets to Deliver Therapies Specifically to the Brain**
Dr. Daniel Gonzalez Carter, 'La Caixa' Junior Leader Research Fellow Molecular Bionics Laboratory Institute for Bioengineering of Catalonia (IBEC) Barcelona (SP)

09.45 **Targeted siRNA Delivery to Treat Non-alcoholic Fatty Liver Disease (NAFLD)**
Prof. Dr. Gert Storm, Institute for Pharmaceutical Sciences, Utrecht University, Utrecht (NL)

10. 00 **Questions and Debate**

10.15 **Break**

Hall 1

Wednesday, 10.45 - 12.15

23. Nanoscale Approaches to Biology

Chair **Prof. Dr. Bert Müller,** Director Biomaterials Science Center, Thomas Straumann-Chair for Materials Science in Medicine, University of Basel, Department of Biomedical Engineering, Allschwil (CH)

About Synthetic biology is the engineering and redesign of biological systems. Still today there is limited Understanding of the huge potential that synthetic biology offers in Nanomedicine.

10.45 **Biomedical Applications of Synthetic Biology**
Prof. Dr. Lior Nissim, Assistant Professor, Head of the Biomedical Synthetic Biology Group, Hadassah Medical School, The Hebrew University of Jerusalem (IL

11.00 **Bernoulli Principle: Forces Acting on Lipid Bilayers in the Cardiovascular System**
Prof. Dr. Bert Müller, Director Biomaterials Science Center, Thomas Straumann-Chair for Materials Science in Medicine, University of Basel, Department of Biomedical Engineering, Allschwil (CH)

11.15 **Developing an Effective mRNA-LNP Vaccine against a Highly Lethal Bacterium**
Prof. Dan Peer, Vice President for Research and Development, Tel Aviv University, Director, Laboratory of Precision NanoMedicine, Managing Director, SPARK Tel Aviv, Center for Translational Medicine, Tel Aviv University, Tel-Aviv (IL)

11.30 **Nanomedicine Hitchhiking with Immune Cells**
Dr. Alexandros Marios Sofias, Principal Investigator, head of the "Immune Cell Targeting and Imaging" Research Group, Institute for Experimental Molecular Imaging (ExMI), RWTH Aachen University Hospital, Aachen (DE)

11.45 **Modular and Adaptive Self-assembling Dendrimers for Nanomedicine**
Prof. Dr. Ling PENG, CNRS Research Director, Equipe Labellisée Ligue Contre le Cancer
Centre Interdisciplinaire de Nanoscience de Marseille, Aix-Marseille University, CNRS, UMR 7325 CINaM Marseille (FR)

11.55 **Questions and Debate**

12.15 **Lunch**

Hall 2
Wednesday, 10.45 - 12.15
24. Applied Mechanobiology in Nanomedicine

Chair **Prof. Dr. Dr. h.c. Viola Vogel,** Head of the Laboratory of Applied Mechanobiology, Department for Health Sciences and Technology (HEST), ETH, Zürich (CH)

About Mechanobiology is a rapidly evolving field revealing that cells not only respond to biochemical factors in their microenvironment, but also to a wide range of physical factors. While much has been learned at the molecular and cellular level on how cells sense and transduce mechanical stimuli, the next challenge is how to best translate this knowledge into the clinic.

10.45 **Mechanobiology of Extracellular Matrix: Why it Matters**
Prof. Dr. Dr. h.c. Viola Vogel, Head of the Laboratory of Applied Mechanobiology, Department for Health Sciences and Technology (HEST), ETH, Zürich (CH)

11.00 **Mechano-Genomics in Health & Disease**
P**rof. Dr. G.V. Shivashankar,** Full Professor of Mechano-Genomics at the Department of Health Science and Technology, ETH Zurich and the Paul Scherrer Institute, Villigen (CH)

11. 15 **Microtissue Approach to Unravel Mechanobiology and ECM-Cell Dynamics Driving Tissue Growth: Paving the Path for Future Nanomedicine Integration**
Dr. med. vet., Dr. sc. ETH Mario C. Benn, Group Leader Department of Health Sciences and Technology, Institute of Translational Medicine Laboratory of Applied Mechanobiology. ETH Zurich. Zürich (CH)

11.30 **Microbubbles for Mechanical Modulation of Biological Barriers upon Combination with Ultrasoun**d.
Dr. Roger Molto Pallares, Junior Group Leader Universitätsklinik RWTH Aachen, Aachen (DE)

11.45 **Questions and Debate**

12.15 **Lunch**

Hall 1

Wednesday, 13-15 - 15.15

25. Entrepreneurship in Nanomedicine: Novel Concepts, Tools Drug Developments and Therapies

(12 'speech; 3' Questions)

Chair **Dr. Neil Desai, PhD,** Founder, Executive Chairman and former CEO, Aadi Bioscience Inc., Pacific Palisades, CA (USA)

About Academic nanomedicine scientists often develop highly innovative medicines, sometimes with little regard for translatability. At the same time, academic tech transfer is not properly aligned with the investor and biotech world. To ensure real-life benefits for future patients, new initiatives must be geared at implementing forward-thinking tools aimed at bridging the academia-investor-biotech gap.

13.15 **Treating Disease by Focusing on Innate Immunity**
Prof. Dr. Willem Mulder, Radboud University Medical Center & Eindhoven University of Technology (NL)

13.30 **New Strategies for in vivo Evaluation of Gene Delivery Technologies**
Prof. Dr. Jörg Huwyler, Professor of Pharmaceutical Technology, University of Basel, Basel (CH)

13.45 **Breaking Barriers with Nanomedicines: Phase 2a Applications in Oncology and Neurology from a Science-Entrepreneur Perspective**
Dr. Stefan Halbherr, CSO, Research and Development, InnoMedica Holding AG, Bern (CH)

14.00 **Challenges in Clinical Development of Nanomedicines**
Dr. Mark B. van Eldijk, Business Unit Director Nanomedicines, ARDENA Oss BV, Oss (NL)

14.15 **The NanoAnalyzer: Combining Flow Cytometry & Particle Analysis to Speed up Nanomedicine development**
Dr. Rob Tempest, Scientific Applications Manager, NanoFCM Co., Ltd., Nottingham (UK)

14.30 **LNP Formulation Screening, a CDMO Perspective**
Umberto Romeo, Head of R&D, CordenPharma SpA, Caponago (IT)

14.45 **Peptide-based Nucleic Acid Nanomedicines for Gene Modulation in Cancer**
Dr. Gilles Divita PhD, Aadigen LLC and Divincell SAS, Nîmes (FR)

15.00 **Granagard: A nano-formulation of Pomegranate seed oil; A smart food supplement for the Prevention of Neurodegenerative Diseases**
Prof. Dr. Ruth Gabizon, CEO and Founder, Granalix Biotechnologies, Jerusalem (IL)

15.08 **Last Questions and Debate**

15.18 **Break**

Hall 2

Wednesday, 13.15 - 14.15

26. Toxicity- and Safety in Nanomedicine

Chair **Dr. Silke Krol,** Senior Editor European Research Services, Münster, (DE) cofounder and CEO of Encytos BV, Enschede, Visiting Scientist at the Mesa-laboratory, University of Twente (NL)

About The complexity of nanodrugs presents an additional dimension for the definition and regulation of toxicity and to guarantee the safety. Both the third dimension as well as the changing properties during decomposition and metabolism of the nanomaterials can induce adverse effects during the complete lifecycles of the nanodrug.

13.15 **3D Printing of Medical Devices: Issues of Patient Safety**
Dr. Ilise Feitshans JD and ScM and DIR, Director, ESI SAFERNANO European Scientific Institute, Archamps (FR); LLM Candidate, Georgetown University Law Center, Washington DC (USA)

13.30 **Regulatory Safety Evaluation of Nanomedical Products: Key Issues to Refine**
Robert E. Geertsma, M.Sc., Centre for Health Protection, National Institute for Public Health and the Environment (RIVM), Bilthoven (NL)

13.45 **Dispelling the Myth - looking at Benefit/ Risk**
Prof. Dr. med. Marisa Papaluca Amati, Regulatory Science and Innovation Visiting Professor, Imperial College London, Department of Primary Care & Public Health, School of Public Health Faculty of Medicine, London (UK)

14.00 **Questions and Debate**

Hall 2
Wednesday, 14.15 -15.15
27. Extracellular Vesicles in Nanomedicine – Exosomes **(9' speech + 1' First Questions)**
Chair **Prof. Dr. med. Raymond Schiffelers,** Professor of Nanomedicine; Division LAB CDL Research; UMC Utrecht; Chairman of the ETP Nanomedicine Executive Board, Utrecht (NL)

About Extracellular vesicles are biological lipid nanoparticles. They are produce by all cell types. They carry essentially all biomolecules that are present in the producing cell and thus contain a complex mixture of lipids, proteins and nucleic acids. They are increasingly recognized as important mediators of intercellular communication in health and disease, where they are able to deliver signals composed of multiple molecules over a distance to affect the acceptor cell. This delivery of biomolecules is an attractive property for nanomedicine applications. Yet their complex composition and the limited understanding of their mechanism of action makes application difficult. This sessions aims to showcase the promises and pitfalls of extracellular vesicles and contrast them to synthetic lipid nanoparticles.

14.15 **Head to Head Comparison of Synthetic and Biological Lipid Nanoparticles**
Prof. Dr. med. Raymond Schiffelers, Professor of Nanomedicine; Division LAB CDL Research; UMC Utrecht; Chairman of the ETP Nanomedicine Executive Board, Utrecht (NL)

14.25 **Extracellular Vesicles: Mechanism of Formation, Characterization and Possible Clinical Use**
Prof. Dr. Kirsten Sandvig, Professor, Institute for Cancer Research, the Norwegian Radium Hospital, Oslo University Hospital Montebello, Oslo (N)

14.35 **Nucleic Acid Based Lipid Nanoparticle Vaccines for Lyme Disease**
Dr. Michael Johnston, PhD Research Scientist, Head of the Nanomedicines Laboratory, Centre for Oncology, Radiopharmaceuticals and Research, Biologic and Radiopharmaceutical Drugs Directorate Health Canada Ottawa (CAN)

14.45 **Nanoparticles: Paving the way to Automation and Standardisation in Scalable Isolation and Single-particle Characterisation**
Dr. Stephane Mazlan, Business Development Director (EMEA), Izon Science Europe SAS, Lyon (FR)

15.00 **Questions and Debate**

15.15 **Break**

Hall 1
Wednesday, 15.45 - 17.00
28. Science and Fake Publications - The Current State of Academic Publications

Chair **Prof. Dr. Lajos Balogh**, Editor-in-Chief, "Precision Nanomedicine" Journal, North Andover, MA (USA)

The selection of articles to trust and detect potential problems requires understanding how values can be identified. What is scientific publishing vs. Fake Publishing? The session wants to elucidate the current state of Academic Publications.

What Makes a Publication Good and What Makes a Scientific Journal Good?

15.45 **Prof. Dr. Lajos Balogh**, Editor-in-Chief, "Precision Nanomedicine" Journal, North Andover, MA (USA)

16.00 **When Journals become Detectives**
Spencer McGrath, MA, Director of Scientific Publications American Association for Thoracic Surgery, Beverly, MA (USA)

16.15 **Beyond Academic Publications: Democs Games and Public Communication**
Dr. Donald Bruce, Managing Director, Edinethics Ltd., Edinburgh, Scotland (UK)

16.30 **Own Experiences as an Author and Reviewer**
Prof. Dr. Ling Peng, CNRS Research Director, Equipe Labellisée Ligue Contre le Cancer
Centre Interdisciplinaire de Nanoscience de Marseille, Aix-Marseille University, CNRS, UMR 7325 CINaM Marseille (FR)

16.45 **Questions and Debate**

17.00 **Short break to get together in Hall 1 for Plenary Session**

Hall 2
Wednesday, 15.45 - 17.00
29. Pharmacokineticis in Nanomedicine and Nanocarriers

Chair **Dr. Marco Siccardi, PhD,** Head of Toxicokinetics, Modeling and Simulation**,** Labcorp Early Development Laboratories Ltd., London (UK)

About The optimization of pharmacokinetics and biodistribution is of utmost importance for the success of Nanomedicines.

15.45 **Biodistribution, Pharmacokinetics and Excretion Studies of Intravenously Injected Nanoparticles and Extracellular Vesicles**
Dr. Tore Skotland, Centre for Cancer Biomedicine, Institute for Cancer Research, University of Oslo, (N)

16.00 **Mechanisms of Accumulation of Nanocarriers in the Skin: Relevance to Toxicities**
Prof. Dr. Dmitri Simberg, Associate Professor, Translational Bio-Nanosciences Laboratory
Department of Pharmaceutical Sciences, Skaggs School of Pharmacy and Pharmaceutical Sciences, University of Colorado, Anschutz Medical Campus, University of Colorado Cancer Center, Developmental Therapeutics Program, Co-Director, Colorado Center for Nanomedicine and Nanosafety (CCNN) (USA)

16.15 **Modulation of Pharmacokinetics of Dual-targeting Nanomedicines for Brain Disorders Crossing the Blood-brain Barrier**
Dr. Bruno Sarmento, Principal Investigator, Nanomedicines & Translational Drug Delivery – Group Leader i3S - Instituto de Investigação e Inovação em Saúde Universidade do Porto, (PRT)

16.30 **Flash Nanoprecipitation: a Versatile Platform for Multifunctional Nanocarriers**
Dr. Carolin Tetyczka, Research Center Pharmaceutical Engineering GmbH (RCPE), Graz (AT)

16.45 **Questions and Debate**

17.00 **Short break to get together in Hall 1 for Plenary Session**

Wednesday, 17-15 - 18.45

17.15 **30. The Regulatory Authorities' Voice 2023**

Chair **Dr. Katherine Tyner,** Liaison to the European Medicines Agency Europe Office EMA, Amsterdam NL / Office of Global Policy and Strategy U.S. Food and Drug Administration FDA, Silver Spring (USA)

Also in 2023, the international regulatory authorities, who have their IPRP during CLINAM, address the participants of the Summit. They make statements on the global cooperation and harmonization between the regulatory authorities. They show progresses to an optimal framework for regulatory matters in nanomedicine and precision medicine. The session helps to create trust and mutual understanding between all stakeholders in nanomedicine and the regulatory authorities. This lowers the barriers to contact the regulatory authorities at an early stage of projects. The session gives the participants room to refer to the needs seen by researchers and industrial developers.

18.45 **Closing Comments by the Organizers**

19.00 **End of Day 3 / End of Summit**

20.00 **Light Farewell Dinner at Restaurant Brauerei**

The Poster Sessions shall be added in August 2023

Call for Papers and Posters

Topics for Abstracts

Clinical Topics

Nanomedicine and targeted delivery and precision medicine for cardiovascular disease, rheumatic disease, oncology, gastro-intestinal/hepatic disease, bacterial infection, viral infection, parasitic infection, implantology, inflammation, hematology, diabetes, neurology, neurosurgery, orphan diseases, eye and ear disease, tuberculosis, HIV, Ebola, tissue repair, orthopedics, etc.

Technology Topics

Nanosystems, nanoparticles, nano-analytics, and diagnostics, toxicology, nano-imaging, targeted drug delivery, using nanoparticles, GMP and quality assurance, propositions for solving a medical problem in a novel way by the use of nanotechnology, novel concepts and ideas if they can be supported by thorough reasoning and could lead to novel research and solutions. Materials for use in nanotechnology and targeted medicine, concepts, diagnosis and therapy in the field of personalized medicine: clinical diagnosis and management on the individual patient's clinical signs and symptoms, medical and family history, and data from laboratory and imaging evaluation to diagnose and treat illnesses, genetic testing that leads to more personalized treatments. In addition, relevant novel tools for translational research and diagnostics are also of high interest, etc.

Implications Topics and Politics

Implications of nanomedicine for society, developing countries, environment, risks and benefits, public health finance, health economics, and other subjects, government strategy and political strategy building and policy processes in nanomedicine. Strategic approaches towards establishing a unified funding area for nanotechnologies for medical research. Policy processes to foster leadership in nanomedicine, regulatory authority topics, and financial and marketing matters.

Industry Topics
Industry projects and solutions in nanomedicine and targeted medicine, tools related to Nanomedicine, and targeted medicine. Industry models for the future large-scale production, Good manufacturing practice, etc.

Regulatory and Societal Affairs, Networking and Financing Topics
Regulatory issues in nanomedicine, AI and digitalization, strategy and policy, the patient's perspective, ethical issues in nanomedicine, Cutting-Edge EU-project presentations, networking for international consortium formation, Venture funding, Fund investment, and Business-Angel Investment.

Exhibitors Topics
Integrated interventions of exhibitors that are of high scientific or technical relevance and do not solely have the purpose of promoting the trademark.

Deadline for Submissions of Abstracts
The Call poster presentations is open **until July 20, 2023**

Submission Procedure (Sending Paper Abstract / Poster Abstract)
Abstract - How to send:
Send us your poster-abstract (Microsoft Word, RTF, or Open document file format, font size 11, single spacing, NO PDF). The submission must not be no longer than 3 pages, including metadata and figures (one figure is obligatory). All illustrations, figures, and tables must be placed within the text at the appropriate place. Index your file as follows: Last Name.First name.abstract23.docx (or RTF etc.)

Biography
Please add in your mail as a separate document with your NARRATIVE CV, max one page. (This is a CV as story and not tabular e.g. I was born…, received…, went to. .) No more than 5 titles of recent publications can be included. Index your file as follows: Last name.First name.CV23.docx (or RTF etc.)

Portrait Photo
Send us a portrait picture in gif or jpg, minimum 300 dpi. DO NOT COPY-PASTE THE PICTURE to Word or Email. Index your file as follows: Last name.First.Name.Picture23 (jpg or gif)

Sending your papers: All correspondence, (applications for poster with abstracts) and questions or comments relating the Submission 2023 have to be sent to submiss23@clinam.org

Decision for Acceptance
The decision to accept or decline your work will be given as soon as possible but at the latest within 6 weeks after submission. You will receive a Decision-E-Mail, stating the acceptance or rejection from the organizers. Decisions of the Committee cannot be discussed.

Presentation Times, Size of Posters, Installation of Posters
Posters are to be presented in the size of 1.40 meters high and 1.00 meter wide. Advice for installation will be communicated in time. In case that we decide to hand out posters to all participants on USB-stick we will ask for your full poster in PDF (Format A4).

Small Speeches for Poster Presenters
The section of Small speeches is open for applications. Poster presenters can apply to give a short oral presentation in a special session of small speeches, 4 minutes in length. They must comprise three slides, • Slide 1: general introduction to the topic • Slide 2: some of the highlights of submitter's work and institution's work • Slide 3: the proof as to how the work fits into the area of Nanomedicine or Precision Medicine, including a glimpse into the future. Application for a small speech is only possible after your poster has been accepted.

The Head of Session, Dr. Ruth Schmid, will select speeches based on a committee's recommendation. The best 40 presentations will be allowed for oral presentation. To apply, write a mail indicating the institution, the

person to be addressed and full address & phone number. In the subject line, write "APPLICATION FOR SMALL SPEECH 2023." Address: smallspeeches23@clinam.org

Fellowship

The Fellowship reduces the prize for attendance to 100.00 € and includes the full Summit-Ticket. Those receiving a fellowship must mandatorily submit an abstract of the proposed poster together with the application. Attach abstract with your submission letter to CLINAM and justify the request for the fellowship. Add a reference letter by a superior of your organization. A limited number of fellowships are available. For sending use the address: Fellow23@clinam.org

Poster Prizes

For the Poster Prizes there shall be 3 Categories. For each Category there will be a first, second and third prize.
- Clinical Nanomedicine and Targeted Medicine – Basic Research
- Clinical Nanomedicine and Targeted Medicine – Translation
- Enabling Technologies; Regulatory and Societal Affairs, Networking and Financing

The poster prizes are sponsored by the EMPA, Switzerland.

Portraits of the Joining Organizers of Excellence Contributing with a Session

The Phospholipid Research Center Heidelberg, Germany

Phospholipid Research Center (PRC) was founded in 2006 by renowned international scientists, each of them conducting research in phospholipids, and with the support of Lipoid GmbH and Phospholipid GmbH. Both companies have continued providing financial donations to the PRC to this day. In the interest of an open and fruitful dialogue between all scientists and developers involved in phospholipids throughout the world, the PRC was conceived as an independent non-profit organization from the very beginning. Since 2006, the PRC has been funding research on phospholipid excipients for pharmaceutical and cosmetic use. The aim is to expand the knowledge on pharmaceutical and technical applications of phospholipid excipients, their ability to improve, for example, the bioavailability and tolerability of active pharmaceutical ingredients in oral, topical, pulmonary, and parenteral dosage forms, and their use as active ingredients. Individual researchers and research groups from all around the world are therefore encouraged to submit a research proposal to apply for funding of research for non-commercial purposes. Especially PhD and Postdoc projects at academic institutes are in focus. More information can be found on www.phospholipid-research-center.com PRC—Connecting the World of Phospholipids.

Liposome Research Days, Vancouver, Canada

Liposomes Research Days (LRD) was founded in 1990 by Hans Schrier at a meeting in Gainsville Florida. International LRD meetings have been held approximately every two years for the last 32 years, rotating between Europe, North America and Asia. LRD meetings are organized at each location by a volunteer group of internationally recognized scientists specializing in liposome and lipid nanoparticle basic research and translation, and in lipid membrane biophysics. It is a loosely organized non-profit organization that honors a senior member of the organization each meeting with the awarding of the prestigious A.D. Bangham FRS Life Achievement Award. Prizes for are also awarded each meeting to junior researchers judged to have the best quality posters. The last LRD meeting was held in Vancouver, Canada in 2022 with over 300 international attendees from academia and industry in attendance. For 2023, the LRD shall have a session during the CLINAM Summit in Basel. https://www.nanomedicines.ca/lrd-2022/#about

International Association for Pharmaceutical Technology (APV), Driver of Pharmaceutical Progress

APV is the independent, international and interdisciplinary scientific organization focusing on pharmaceutical technology and industrial pharmacy. Our goal is to deepen the understanding in scientific research and practical knowledge in the areas of development, manufacturing, analysis, quality assurance, distribution and use of pharmaceuticals as well as medical devices and to educating all relevant professionals in order to provide effective and save health products for patient care now and in future. https://www.apv-mainz.de/pharma-verfahrenstechnik/

Registration for the Summit

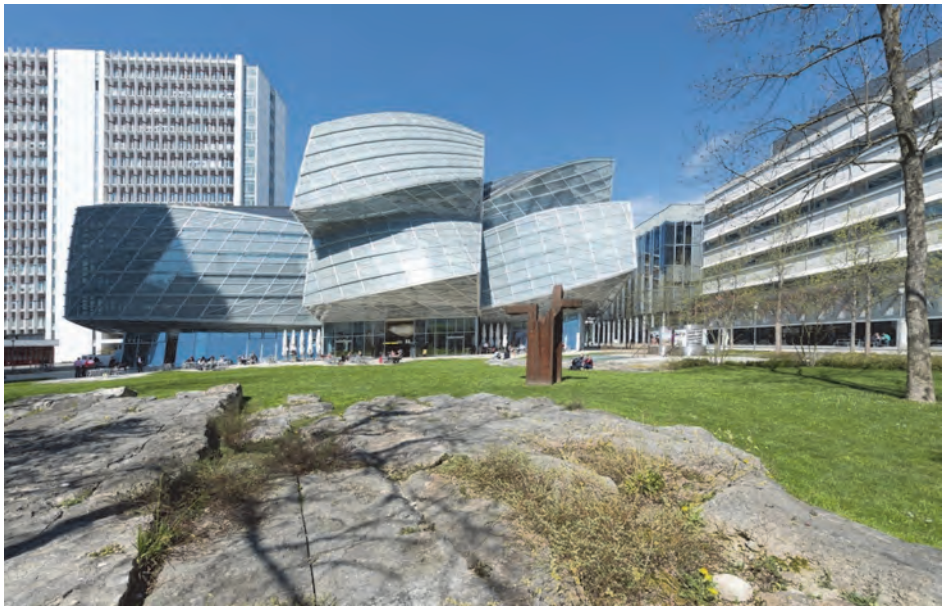
ONLINE REGISTRATION ONLY. Payment by credit card (MasterCard or VISA)

The registration for entire programme, proceedings, lunches and coffee breaks.

Currency is EURO	**3 Days Early Bird until 5.8. 2023**	**3 Days Regular as from 6.8. 2023**	**1 Day**
Virtual Participation	360.00 €		
Academy, NPO	680.00 €	750.00 €	390.00 €
Invited Speakers	250.00 € (optional: ☐ I can contribute ☐ Not at this moment) Option will be in the registration folder		
Submitting Speakers	450.00 €		
Poster Presenters	400.00 €		
Poster Presenters Student	360.00 €		
Industry & Government	1'000.00 €	1'400.00 €	800.00 €
Exhibitors	Exhibition space 3'500.00 € incl. one exhibitors registration		
Students	360.00 €		
Fellowships	A restricted number of Fellowships will be given for 100.00 € Participation in the events is not included		
Networking Dinner open to all participants MO 9.10.	70.00 € This Dinner includes a cultural event and the awarding of the CLINAM Dwarf Award 2023		
Invited Speakers & Special Guests Dinner TUE 10.10.	Upon Invitation		
Light Farewell Dinner WED 11.10	60.00 € (booked or paid at site)		

Venue for the Summit

The Architect Frank Owen Gehry, is a Canadian-born American architect and designer with world-renowned buildings. His style is considered deconstructivism, a movement in postmodern architecture where elements of the design appear to be fragmented. His architecture is typically characterized by flowing lines, and surfaces that vary from titanium cladding to metal Blobitectural modular parts.



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Exhibitors at the 14th European and Global Summit for Clinical Nanomedicine 2023

Polymun Scientific Immunbiologische Forschung GmbH, Klosterneuburg(AT), **NanoFCM Co., Ltd,** Nottingham (UK), **Resistell Ltd,** Muttenz (CH), **Lipoid AG,** Steinhausen (CH), **ARDENA**, Oss (NL), **PRECISION NANOSYSTEMS**, Vancouver, BC (CND), **TECOmedical AG,** Sissach (CH), **InnoMedica Holding AG**, Marly (CH), **PRNANO,** Andover (USA), **CordenPharma International,** Basel (CH), **Joint Organizers Table** (CLINAM, Liposome Research Days, APV) **SyVento sp. z o.o.**, Oświęcim, (POL)

Lipoid

INNOMEDICA

POLYMUN SCIENTIFIC

ARDENA

Resistell

PRECISION NANOSYSTEMS

nanofcm

IZON

Corden Pharma

syvento

Joint Organizers Table

Phospholipid Research Center

APV MAKING SCIENCE WORK

CLINAM
European Foundation for Clinical Nanomedicine
Switzerland

PRNANO

LIPOSOME RESEARCH DAYS

CLINAM Exhibition Registration 2023

Exhibitors at the CLINAM Summit 2023 profit from meeting their potential clients in one spot since CLINAM is presently the world´s largest summit on Clinical Nanomedicine with this year 250 - 350 participants in need of tools, systems platforms findings, research results and other devices.

SMEs and start-up companies have the chance to display their skills and to meet the Nanomedicine Community, all stakeholders in the field of clinical nanomedicine, targeted delivery and precision medicine and related fields. This is a Foyer exhibition. All breaks and catering for lunches are held in midst of the CLINAM marketplace.

Registration for the Exhibition (Free for Sponsors)

I herewith register a space of 6m2 in the foyer of the halls at Novartis from October 8 -11, 2023 at the rate of 3'500.00 € incl. one **exhibitor's** registration.

Company name

Contact person

Street

ZIP / Place Country

Phone landline

Phone Mobile

E-Mail

Since there is only space and no booth construction we offer separate services as follows:

0	Company name A3 on pillar	100.00 €
0	1 table, 2 chairs	130.00 €
0	1 pin board for poster	40.00 €
0	Power connection	30.00 €
0	Further Exhibitors Registrations (add how many) (Rate equivalent to early bird tariff)	1'000.00 €

Please confirm with signature on the folder your order and send a scan to loeffler@clinam.org with the reference "exhibition"

Signature _____

Company stamp

CLINAM IN THE MEDIA

See the journal at https://precisionnanomedicine.com/

PRNANO - The official journal of CLINAM and ISNM
A peer-reviewed, international nonprofit platinum Open Access online journal, Indexed in SCOPUS and DOAJ

INVITATION TO PUBLISH IN PRECISION NANOMEDICINE on behalf of CLINAM and Andover House
This journal does not charge submission or article procession fees, and authors retain ownership of their work. All content is freely available to the user or his/her institution. Users (including authors) are allowed to submit, read, download, copy, print, share, search, or link to the full texts of the articles or use them for any other lawful purpose without asking prior permission from the publisher or the author.

The Mission
The journal promotes all practical, rational, and progressive aspects of nanomedicine including theory and practice in basic science, translational, preclinical, and clinical research. PRNANO accepts original manuscripts**,** as well as replication studies and discussions of negative results if they move the field forward.

The journal's aim and scope are to distribute good quality, reproducible, and reliable articles with a quick turnaround time. PRNANO supports publications of CLINAM members, members of other national nanomedicine societies, and nanomedicine researchers.

Previously presented works
We support authors who wish to share their work early through the deposition of manuscripts with preprint servers such as bioRxiv or arXiv, have previously been presented at conferences, published as a thesis, or have previously appeared in other "non-journal" venues (e.g., blogs or posters).

Supporting peer-review
PRNANO provides a cutting-edge and encouraging peer-review process from its Editorial Board members, forty-five of which belong to the World's top 2% of scientists and 25 to 1% by citations.

Articles are published continuously
They are organized into quarterly issues and annual volumes. All articles receive a unique identifier (DOI:10.33218/001c.#####) and are archived both in Portico and Crossref, for preservation. We are members of COPE (https://publicationethics.org/members/precision-nanomedicine).

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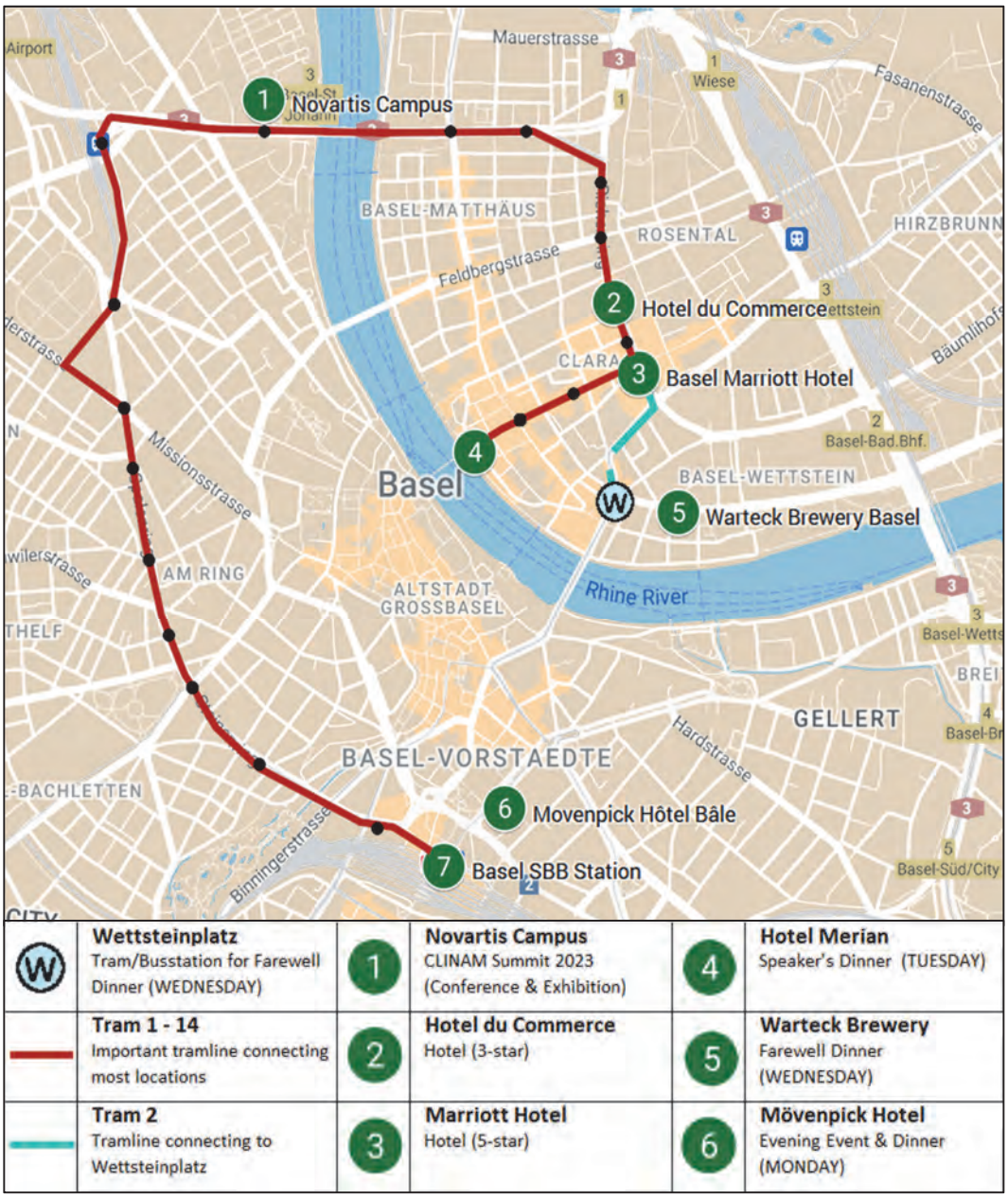
Map for all locations in the Summit



How to get to the Novartis Campus from the Hotel:

When leaving from the hotels, take Tram number 14 from station Messeplatz **into the direction** Dreirosenbrücke**.**
Tram 14 will change into Tram 1, stay on the same Tram. **The 5th station is** Novartis Campus

Tram instructions (MONDAY Evening event & Dinner):

When leaving from Novartis Campus, take Tram 1 **into the direction BahnhoF SBB. After 11 stops, get out at** Bahnhobf SBB**.**
Cross the street towards Hotel Mövenpick (80-meter-high white-building)

Tram Instructions (TUESDAY Dinner):

When leaving from Novartis Campus, take Tram 1 **into the direction Dreirosenbrücke. At this stop, tram 1 will change into tram 14.** Stay on the same tram**. After 8 stations, get out at** Rheingasse**. Afterwards, you stand in front of Hotel Merian.**

Tram Instructions (WEDNESDAY Farewell Dinner):

When leaving from Novartis Campus, take Tram 1 **into direction Dreirosenbrücke. This tram will change into tram 14,** stay on the same tram**. After 5 stops, get out at** Messeplatz **and change to** Tram 2 **into direction Bahnhof SBB. Get out at the first stop at** Wettsteinplatz **and walk 4 minutes to the Warteck Brewery (walking from Messeplatz takes 12 minutes)**

From Tram-Station Novartis Campus to Summit Hall

Sponsors of the CLINAM-Summit 2023

Novartis Pharma Ltd., Basel (CH), **Polymun Scientific Immunbiologische Forschung** GmbH, Klosterneuburg (AT), **Swiss Nanoscience Institute** at the University Basel, Basel (CH), **NanoFCM Co., Ltd,** Nottingham (UK) **Resistell Ltd,** Muttenz (CH), **Lipoid AG,** Steinhausen (CH), **ARDENA**, Oss (NL), **PRECISION NANOSYSTEMS**, Vancouver, BC (CND), T**ECOmedical AG**, Sissach (CH), **National Centre of Competence in Research, Molecular Systems**, Basel (CH), **Helmholtz Institute for Pharmaceutical Research** Saarland (HIPS) (DE) **The Canton of Basel-Stadt**, Basel (CH), **The Canton of Basel-Landschaft**, Liestal (CH), **Freiwillige Akademische Gesellschaft** (FAG), Basel (CH), **Isaac Dreyfus-Bernheim Foundation**, Basel (CH), **European Materials Research Society** (EMRS), Strasbourg (F), **Phospholipid Research Center**, Heidelberg (DE) **InnoMedica Holding AG**, Marly (CH), **EMPA** Materials & Technology, St.Gallen (CH), , **PRNANO,** Andover, MA (USA) **CordenPharma International**, Basel (CH) **IZON, LTD (EMEA),** Lyon (FR) **, AstraZeneca, Cambridge (UK), L. + Th. La-Roche-Stiftung, Basel** …and further sponsors

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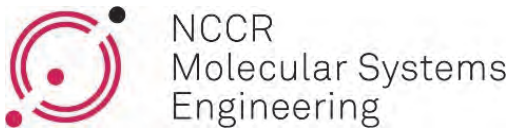

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